



## UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
[www.uspto.gov](http://www.uspto.gov)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/523,106	02/03/2005	Hiroshi Dairiki	46242	7579	
20736	7590	12/22/2010			
MANELLI DENISON & SELTER 2000 M STREET NW SUITE 700 WASHINGTON, DC 20036-3307				EXAMINER	
		SULLIVAN, DANIELLE D		PAPER NUMBER	
		1617			
		MAIL DATE		DELIVERY MODE	
		12/22/2010		PAPER	

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/523,106	<b>Applicant(s)</b> DAIRIKI ET AL.
	<b>Examiner</b> DANIELLE SULLIVAN	<b>Art Unit</b> 1617

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

1) Responsive to communication(s) filed on 17 September 2010.  
 2a) This action is FINAL.      2b) This action is non-final.  
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

4) Claim(s) 1-3 and 5 is/are pending in the application.  
 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
 5) Claim(s) \_\_\_\_\_ is/are allowed.  
 6) Claim(s) 1-3 and 5 is/are rejected.  
 7) Claim(s) \_\_\_\_\_ is/are objected to.  
 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

9) The specification is objected to by the Examiner.  
 10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
 a) All    b) Some \* c) None of:  
 1. Certified copies of the priority documents have been received.  
 2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)	4) <input type="checkbox"/> Interview Summary (PTO-413)
2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-946)	Paper No(s)/Mail Date _____
3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)	5) <input type="checkbox"/> Notice of Informal Patent Application
Paper No(s)/Mail Date _____	6) <input type="checkbox"/> Other: _____

**DETAILED ACTION**

**Claim Status**

Applicants' response on 9/17/2010, to the non-final Office action dated 6/21/2010 has been entered. Claims 1-3 and 5 were amended. No claims were cancelled or newly added.

Claims 1-3 and 5 remain pending in the application and are under examination.

***Withdrawn Claim Rejections - 35 USC § 103***

Applicant's amendments and arguments filed 9/17/2010 are acknowledged and have been fully considered. You must indicate what the rejections were and why the rejections are being withdrawn.

Claims 1, 2 and 5 were previously rejected under 35 U.S.C. 103(a) as being unpatentable over Bramati et al. (US 5,981,433) in view of Suzuki et al. (US 2003/0036481) and Nakayama et al. (US 6,774,087).

Claim 3 was previously rejected under 35 U.S.C. 103(a) as being unpatentable over Bramati et al. (US 5,981,433) in view of Suzuki et al. (US 2003/0036481) and Nakayama et al. (US 6,774,087) and in further view of Suzuki et al. (US 5,980,926).

Applicants have amended the claims to recite the limitation "wherein the amount of potassium chloride is about 10% by weight of the total composition" in claim 1; the limitation not previously required to be addressed. Accordingly, the rejections are hereby withdrawn.

Newly formulated rejections have been necessitated over the prior art of record in view of the amendment filed September 17, 2010.

***New Claim Rejections - 35 USC § 112- New Matter***

Applicants' claim amendments have necessitated the following new grounds of rejection.

The following is a quotation of the first paragraph of 35 U.S.C. §112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Applicant's claim amendments have necessitated the following new ground of rejection.

Claim 1 is newly rejected under 35 U.S.C. §112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter that was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art (hereafter the Artisan), that the inventor(s), at the time the application was filed, had possession of the claimed invention. 37 CFR §1.118 (a) states that "No amendment shall introduce new matter into the disclosure of an application after the filing date of the application".

The claims have been amended to recite the limitation of "the amount of potassium chloride is about 10% by weight of the total composition" Applicants state that no new matter has been added, and that the amount is supported in the present specification at page 13, lines 11-12. However, the instant specification teaches a formulation comprising 10 parts potassium chloride. The specification fails to disclose either explicitly or implicitly, the newly introduced limitations, as claimed.

Thus, at the time the application was filed, an Artisan of skill would not recognize from the disclosure that Applicant was in possession of the amount of potassium chloride as about 10% by weight of the total composition.

MPEP 2163.06 notes: "If new matter is added to the claims, the examiner should reject the claims under 35 U.S.C. 112, first paragraph - written description requirement. *In re Rasmussen*, 650 F.2d 1212, 211 USPQ 323 (CCPA 1981)." MPEP 2163.02 teaches that "Whenever the issue arises, the fundamental factual inquiry is whether a claim defines an invention that is clearly conveyed to those skilled in the art at the time the application was filed...If a claim is amended to include subject matter, limitations, or terminology not present in the application as filed, involving a departure from, addition to, or deletion from the disclosure of the application as filed, the examiner should conclude that the claimed subject matter is not described in that application. MPEP 2163.06 further notes "When an amendment is filed in reply to an objection or rejection based on 35 U.S.C. 112, first paragraph, a study of the entire application is often necessary to determine whether or not "new matter" is involved. Applicant should therefore specifically point out the support for any amendments made to the disclosure".

This is a new matter rejection.

***New Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Applicant's claim amendments have necessitated the following new grounds of rejection.

**Claims 1, 2 and 5 are newly rejected under 35 U.S.C. 103(a) as being unpatentable over Suzuki (WO 01/47355 (English equivalent US 2003/0036481); effective date July 5, 2001) in view of Bramati et al. (US 5,981,433; effective date November 11, 1999) and in further view of Nakayama et al. (US 6,774,087; effective date May 20, 2002). Applicant's Invention**

Applicant claims a granulated composition comprising a pesticidal ingredient selected from cyflufenamid, triflumizole, etc., about 10%, by weight of the total composition of potassium chloride, sodium lignosulfonate with a degree of sulfonation of at least 2 and a sulfate or phosphate salt of polyoxyalkylene arylphenyl ether, wherein the sulfate or phosphate salt is selected from polyoxyethylene tristyrylphenyl ether sulfate salt and polyoxyethylene tristyrylphenyl ether phosphate salt. Claim 2 limits the amount of sodium lignosulfonate surfactant to 1-15% and the salt of the polyoxyalkylene arylphenyl ether to 0.01-15%. Claim 5 specifies the active comprises triflumizole.

**Determination of the scope and the content of the prior art  
(MPEP 2141.01)**

Suzuki teaches granular water-dispersible agents wherein the dispersing agents are selected from tristyrylphenyl ether or distyrylphenyl ether added to polyoxyethylene, tristyrylphenyl ether phosphate or distyrylphenyl ether sulfate added to polyoxyethylene and sodium ligninsulfonate, wherein two or more of the compounds may be used in combination as the dispersing agent (paragraph [0032]). Carriers consist of minerals selected from an inorganic salt such as potassium chloride (paragraph [0034]); limitations of claim 1). Examples comprising 100g triflumizole, 140g sodium

ligninsulfonate and 237.5 potassium chloride are further disclosed (paragraph [0044]; limitation of claim 5). Other examples utilize 36% triflumizole, 3% sodium lignosulfonate, 4% polyoxyethylene tristyrylphenyl ether and 10% potassium chloride (Examples 5 and 6, Table 1).

**Ascertainment of the difference between the prior art and the claims**

**(MPEP 2141.02)**

Suzuki does not teach the sodium lignosulfonate has a degree of sulfonation of at least 2.0 or that the sulfate or phosphate salt of polyoxyalkylene aryl phenyl ether are used. It is for this reason that Bramati and Nakayama et al. are joined.

Bramati et al. teach a dispersing agent for plant protection agrochemicals such as pesticidal dispersible granules, comprising (a) a lignosulfonate admixed with (b) sulfated triphenyl phenols (abstract). Preferably, a exemplary combination of REAX 88B or Polyfon O (3.8 sulfonation) and a tristyrylethoxylated sulfated ammonium salt (Soprophor 4D384) (column 3, lines 10-17).

Bramati et al. teach the particular species selected from polyoxyethylene tristyrylphenyl ether sulfate salt, however, polyoxyethylene tristyrylphenyl ether phosphate salts are not taught. It is for this reason that Nakayama et al. is joined.

Nakayama et al. teaches herbicidal composition comprising sulfate-type and phosphate-type surfactants and their salts. The liquid herbicide comprises at least one anionic surfactant selected from sulfate-type surfactants and phosphate-type surfactants (column 2, lines 51-53). The surfactants include polyoxyethylene (mono, di or tri)styrylphenyl ether sulfates, polyoxyethylene (mono, di or tri)styrylphenyl ethers

phosphates and their salts (column 1, lines 51-65; column 2, lines 24-37 and 56-65).

Hence there is a teaching of equivalence between the sulfate salt and the phosphate salt in these polyoxyethylene (mono, di or tri)styrylphenyl ether anionic surfactants .

**Finding of prima facie obviousness**

**Rationale and Motivation (MPEP 2142-2143)**

Suzuki, Bramati et al. and Nakayama et al. are all drawn to water dispersible herbicidal formulations. It would have been prima facie obvious to one of ordinary skill in the art at the time of the invention to combine the teachings of Suzuki, Bramati et al. and Nakayama et al. with a reasonable expectation of success because they are all drawn to methods of formulating plant protecting formulations. In view of Bramati et al. it would have been prima facie obvious to utilize sodium lignosulfonate with a degree of sulfonation greater than 2.0, such as REAX 88B, because REAX 88B is exemplary when combined with tristyrylethoxylated sulfated ammonium salt as a dispersing agent. Furthermore, one of ordinary skill would have been motivated to utilize phosphate or sulfate polyoxyethylene arylphenyl ether surfactants because Nakayama et al. teach that they are anionic surfactants and one of ordinary skill would have been able to substitute polyoxyethylene styrylphenylether sulfates with polyoxyethylene styrylphenylether phosphates and their salts with a reasonable expectation of success.

Therefore, one of ordinary skill in the art would have been able to combine the teachings of Suzuki, Bramati et al. and Nakayama et al. to obtain a formulation comprising triflumizole, about 10%, by weight of the total composition of potassium chloride, sodium lignosulfonate with a degree of sulfonation of at least 2 and a sulfate or

phosphate salt of polyoxyalkylene arylphenyl ether, wherein the sulfate or phosphate salt is selected from polyoxyethylene tristyrylphenyl ether sulfate salt and polyoxyethylene tristyrylphenyl ether phosphate salt with a reasonable expectation of success.

Claims 1 and 3 are newly rejected under 35 U.S.C. 103(a) as being unpatentable over Suzuki (WO 01/47355 (English equivalent US 2003/0036481); effective date July 5, 2001), Bramati et al. (US 5,981,433) and Nakayama et al. (US 6,774,087), as applied to claims 1, 2 and 5 above, in further view of Suzuki et al. (US 5,980,926; November 9, 1999, herein referred to as "Suzuki '926" ).

#### **Applicant's Invention**

Applicant claims a granulated composition comprising a pesticidal ingredient selected from cyflufenamid, triflumizole, etc., about 10%, by weight of the total composition of potassium chloride, sodium lignosulfonate with a degree of sulfonation of at least 2 and a sulfate or phosphate salt of polyoxyalkylene arylphenyl ether, wherein the sulfate or phosphate salt is selected from polyoxyethylene tristyrylphenyl ether sulfate salt and polyoxyethylene tristyrylphenyl ether phosphate salt. Claim 3 specifies the active is cyflufenamid.

#### **Determination of the scope and the content of the prior art (MPEP 2141.01)**

The teachings of Suzuki, Bramati et al. and Nakayama et al. are described in above 103 rejection.

**Ascertainment of the difference between the prior art and the claims**

**(MPEP 2141.02)**

Suzuki, Bramati et al., Nakayama et al. do not teach the particular pesticide cyflufenamid. It is for this reason that Suzuki '926 is joined.

Suzuki '926. teach water dispersible granules suitable for preparing the formulations of pesticides with excellent dispersibility (abstract, column 2, lines 10-16). The pesticidal components preferably include triflumizole (column 2, lines 45-47. Example 1), cyflufenamid (structure of formula [1], column 3, Table 1, No. 1, Example 4) or a combination of the two (column 2, line 39-column 4, line 25). Additionally, the granule is combined at the wet milling process with tristyryl phenyl ether added thereon with polyoxyethylene (column 4, lines 26-34). Also, a dispersion aid, sodium lignosulfonate, was added at the time of wet milling (column 4, lines 35-41).

**Finding of *prima facie* obviousness**

**Rationale and Motivation (MPEP 2142-2143)**

Suzuki, Bramati et al., Nakayama et al. and Suzuki '926 are all drawn to water dispersible herbicidal formulations. Therefore it would have been *prima facie* obvious to one of ordinary skill in the art at the time of the instant invention to combine the teachings of Suzuki, Bramati et al. Nakayama et al. and Suzuki '926 to utilize cyflufenamid with a reasonable expectation of success. One of ordinary skill in the art would have been motivated to utilize cyflufenamid because Suzuki '926 teach that

Art Unit: 1617

cyflufenamid is used as a substitute for triflumizole and is preferably formulated into water dispersible granules and provide excellent dispersibility. One of ordinary skill would have been motivated to select cyflufenamid because Suzuki et al. teach that it is a plant-protecting active ingredient which can be substituted in the place of triflumizole, since these actives were known at the time of invention to be formulated as water dispersible granules tristyryl phenyl ether and sodium lignosulfonate.

#### ***Response to Arguments***

To the extent that Applicant's arguments filed 9/17/2010 are applicable to the new rejections set forth above, they are addressed as follows:

Applicants' arguments have been fully considered but they are not found persuasive.

First, Applicants argue that Suzuki does not refer to potassium chloride as a dispersing agent and only refers to it as being applied in the dry milling process and is not relevant to the invention of Bramati et al. The Examiner is not persuaded by this argument. In view of the new rejection Suzuki et al. teaches formulations with 36% triflumizole, 3% sodium lignosulfonate, 4% polyoxyethylene tristyrylphenyl ether and 10% potassium chloride (Examples 5 and 6, Table 1). Claim 1 does not limit potassium chloride to a dispersing agent and only lacks in specifying the sodium lignosulfonate has a sulfonation greater than 2.0. Bramati et al. teach that adding REAX 88B is prima facie obvious because it is exemplary when combined with tristyrylethoxylated sulfated ammonium salt as a dispersing agent.

Applicant further argues Nakayama et al. relates to a liquid herbicide whereas the present invention is a water dispersible particle. This viewpoint is noted, however, the primary reference teaches a water dispersible particle and the reference has been relied upon to show the equivalence of the polyoxyethylene styrylphenylether sulfates and polyoxyethylene styrylphenylether phosphates. Furthermore, Suzuki, Bramati et al. and Nakamaya et al. are all drawn to methods of formulating plant protecting formulations. Therefore, substituting of the polyoxyethylene styrylphenyl ethers would have been *prima facie* obvious.

***Response to Amendment***

The declarations under 37 CFR 1.132 filed July 31, 2009 and May 21, 2010 are insufficient to overcome the rejection of claims 1-3 and 5 based upon the new rejection in view of Applicant's amendment.

The declaration submitted July 31, 2009 is not in the form of a side-by-side comparison with the teachings of Suzuki. The showing details how the addition of 10% potassium chloride aids in dispersion when used in combination with sodium lignosulfonate with a degree of sulfonation that is 4.7. Suzuki teaches a formulation comprising sodium lignosulfonate and 10% potassium chloride but is silent as to the degree of sulfonation. Therefore, absent a showing of unexpected results over the sodium lignosulfonate disclosed in Suzuki the combination is viewed as *prima facie* obvious.

The declaration submitted May 21, 2010 is not in the form of a side-by-side comparison with the teachings of Suzuki. The showing details how sodium lignosulfonate contributes over with calcium lignosulfonate, however the degree of sulfonation is not detailed. and Suzuki teaches a formulation comprising sodium lignosulfonate and 10% potassium chloride in their examples. Therefore, absent a showing of unexpected results over the sodium lignosulfonate disclose in Suzuki the combination is view as *prima facie* obvious.

***Conclusion***

**No claims allowed.**

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to DANIELLE SULLIVAN whose telephone number is (571)270-3285. The examiner can normally be reached on 7:30 AM - 5:00 PM Mon-Thur EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Fereydoun Sajjadi can be reached on (571) 272-3311. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Danielle Sullivan  
Patent Examiner  
Art Unit 1617

/Fereydoun G Sajjadi/  
Supervisory Patent Examiner, Art Unit 1617